MEMORY EFFICIENT OCCURRENCE MODEL DESIGN FOR VLSI CAD

ABSTRACT OF THE DISCLOSURE

The inventive lightweight occurrence model uses a folded connectivity model which includes occurrence nodes. Each occurrence node includes occurrence specific data or a pointer to such data, a pointer to a parent occurrence node, and a pointer to a folded model describer. Thus, the information that would present in a full occurrence model can be included in the inventive lightweight occurrence model. The inventive model does not maintain duplicate information and requires less memory to store the inventive model. Since the inventive occurrence model is smaller than the full occurrence model, complex circuit designs, e.g. microprocessors, can be represented by the inventive lightweight occurrence model. Thus, low level characteristics of the design, e.g., timing delays, can be examined.

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